

# United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,595	08/27/2003	Peilin Chen	02558B-069000US	7928
20350	7590 07/26/2005		EXAM	INER
	D AND TOWNSENI RCADERO CENTER	CHEN, STAC	CY BROWN	
EIGHTH FLOOR SAN FRANCISCO, CA 94111-3834			ART UNIT	PAPER NUMBER
			1648	

DATE MAILED: 07/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/650,595	CHEN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Stacy B. Chen	1648				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a repl - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be by within the statutory minimum of thirty (30) will apply and will expire SIX (6) MONTHS fit a, cause the application to become ABANDO	e timely filed  days will be considered timely.  om the mailing date of this communication.  NED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 06 M	lay 2005.					
· · · · · · · · · · · · · · · · · · ·						
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-5 and 7-12 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration.  5) Claim(s) is/are allowed.  6) Claim(s) 1-5 and 7-12 is/are rejected.  7) Claim(s) is/are objected to.  8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers		•				
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Example 11.	epted or b) objected to by the drawing(s) be held in abeyance. Ition is required if the drawing(s) is	See 37 CFR 1.85(a). objected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119  12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date</li> </ol>	4) Interview Summ Paper No(s)/Mai  5) Notice of Inform 6) Other:					

Art Unit: 1648

### **DETAILED ACTION**

- 1. Applicant's amendment filed May 6, 2005 is acknowledged and entered. Claims 1-5 and 7-12 are pending and under examination.
- 2. The rejection of claims 6-12 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, is withdrawn in view of Applicant's amendment that deletes the term "derived".
- 3. The rejection of claims 1-3 under 35 U.S.C. 102(b) as being anticipated by Guilbert *et al*. (*J. Immunology*, 1982, 128(6):2779-2787) is withdrawn in view of Applicant's amendment. The broadest claim is now limited to specific pathogens in claim 1 that are not discussed in the reference.
- 4. The rejection of claims 1-5 under 35 U.S.C. 102(b) as being anticipated by Berneman *et al.* (*Eur. J. Immunol.* 1992, 22:625-633) is withdrawn in view of Applicant's amendment. The broadest claim is now limited to specific pathogens in claim 1 that are not discussed in the reference.

# Claim Rejections - 35 USC § 102 - Response to Applicant's Arguments

5. Claims 1-3 and 7-8 remain rejected under 35 U.S.C. 102(b) as being anticipated by Luka et al. (J. Immunological Methods, 1984, 67:145-156, herein, "Luka"). Applicant's arguments have been carefully considered, but fail to persuade. Applicant's substantive arguments are primarily drawn to the following:

Art Unit: 1648

Applicant asserts that Luka did not pool the individual sera prior to ELISA, implying
that Luka's composition did not contain heterologous antibodies. Applicant stresses
that heterologous antibodies according to the specification are not from the same
source.

- In response to this argument, Luka discloses a serum pool containing antibodies to all 4 antigen complexes (EBNA, VCA, EA and MA) on page 149, last paragraph. With regard to the definition of "heterologous antibodies" that are not from the same source, Applicant is arguing a product by process. The origin of the antibodies does not lend patentability to the antibodies themselves as long as they bind the indicated antigens. Even if there are structural differences between antibodies produced in one source versus another source, those differences do not affect the function of the antibodies: binding to antigens.
- Applicant argues that Luka's experiments are equivocal with regard to the pooling of the antigens into one serum composition.
  - In response to this argument, the disclosure on page 149, last paragraph, unequivocally demonstrates that a serum pool was indeed produced.
- 6. Claims 1, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Wong *et al.* (US Patent 5,478,753, herein, "Wong"). This rejection was previously applied to claim 1 and 6. However, claim 6 has been cancelled, and claims 1, 4 and 5 have been amended such that their scope is limited to particular antigens. Claims 4 and 5 are drawn to compositions of claim 1 that contain ten or fifteen heterologous antibodies from the list in claim 1. With regard to the

Art Unit: 1648

particular number of antibodies in claims 4 and 5, one would expect that Wong's multiple antibody calibrator composition would contain numerous antibodies to different pathogens since Wong discloses that a plurality of antibodies can be used in one assay (col. 5, lines 15-25).

Applicant's arguments have been carefully considered but fail to persuade. Applicant's substantive arguments are primarily drawn to the following:

- Applicant argues that the antibodies in Wong's calibration composition have only one antigen binding specificity.
  - In response to this argument, Applicant is arguing a limitation that is not in the claims. While the claims refer to antibodies that "specifically bind", this phrase is defined in the specification as antibodies that confirm the presence of an antigen.

    Wong's antibodies meet the claim limitation as defined by the specification.
- Applicant argues that Wong's suggestion to test antibodies against multiple
  infectious pathogens is merely referring to the use of several different calibrators, not
  a single calibrator containing multiple antibodies.
  - In response to this argument, Wong explicitly teaches that one calibration composition can be used for a plurality of assays instead of requiring separate a calibrator/control composition for each assay (col. 5, lines 15-24). The Office interprets Wong's disclosure to mean that one calibrator contains multiple antibodies.

Page 5

Application/Control Number: 10/650,595

Art Unit: 1648

## Claim Rejections - 35 USC § 103 - Response to Applicant's Arguments

- 7. Claim 10 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Wong in view of Desmonts *et al.* (US Patent 4,612,281, herein, "Desmonts") for reasons of record. Claims 9 and 11 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Wong in view of Desmonts as applied to claim 10 above, and further in view of Gans *et al.* (*J. Infect. Dis.*, 2001, 184:817-826, herein, "Gans"), Yi *et al.* (US Patent 6,794,153, herein, "Yi"), Krell *et al.* (US Patent 6,479,248, herein, "Krell") and Luka, for reasons of record. Claim 12 remains rejected under 35 U.S.C. 103(a) as being unpatentable over Wong in view of Desmonts, Gans, Yi, Krell and Luka as applied to claims 9 and 11 above, and further in view of Lo *et al.* (US Patent 5,532,134, herein, "Lo"), for reasons of record. Applicant's arguments have been carefully considered but fail to persuade. Applicant's arguments are hinged on the assertion that Wong does not teach a calibrator composition comprising multiple heterologous antibodies. Applicant's substantive arguments are primarily drawn to the following:
  - Applicant argues that the antibodies in Wong's calibration composition have only one antigen binding specificity.
    - In response to this argument, Applicant is arguing a limitation that is not in the claims. While the claims refer to antibodies that "specifically bind", this phrase is defined in the specification as antibodies that confirm the presence of an antigen.
       Wong's antibodies meet the claim limitation as defined by the specification.
  - Applicant argues that Wong's suggestion to test antibodies against multiple infectious pathogens is merely referring to the use of several different calibrators, not a single calibrator containing multiple antibodies.

Art Unit: 1648

In response to this argument, Wong explicitly teaches that one calibration composition can be used for a plurality of assays instead of requiring separate a calibrator/control composition for each assay (col. 5, lines 15-24). The Office interprets Wong's disclosure to mean that one calibrator contains multiple antibodies.

#### Conclusion

#### 8. No claim is allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

Page 7

Application/Control Number: 10/650,595

Art Unit: 1648

applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stacy B. Chen whose telephone number is 571-272-0896. The examiner can normally be reached on M-F (7:00-4:30). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James C. Housel can be reached on 571-272-0902. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Stacy B. Chen July 21, 2005 SUPERVISORY PATENT EXAMINED TECHNOLOGY CENTER 1600